BRIEF IN SUPPORT OF PETITION

Opinions of the Courts Below

The opinion of the District Court in the form of Findings of Fact and Conclusions of Law appears at R. 36.

The opinion of the Court of Appeals for the Sixth Circuit is reported 65 USPQ 203 (R. 412). For the amendment thereto (unreported) see R. 423.

Statement

It is believed that the facts and issues are sufficiently stated in the summary statement of the petition and in the statement of questions presented.

Specification of Errors

The specification of errors relied upon are the reasons for the allowance of the writ as set forth in the petition.

Summary of Argument

The points of the argument are those set forth in the petition as reasons for allowance of the writ.

Argument

POINT I. The Court of Appeals for the Sixth Circuit appears to have overlooked the public interest in applying the rule of res adjudicata in this case and in not following the application of the rule of upholding the public interest as this Court stated should be done in *Mercoid Corporation* v. *Mid-Continent Investment Co.*, 320 U. S. 661, 88 L. Ed. 376.

It is believed that the Court of Appeals for the Sixth Circuit has overlooked the public interest in applying the rule of res adjudicata in this case. The record in this case differs materially from the record in the Massachusetts case.

While petitioner's structure Exhibit 3 was involved in the Massachusetts case, Exhibits B and C were not involved there.

In order to urge infringement by Exhibits B and C respondent evolved its present overlapping in space theory, 100% overlap with vanes in fully open position in which position they perform no work. Overlapping in space is an incident to all adjustable multiple vane controls, including several expired patents. The Court of Appeals for the Sixth Circuit quoted from the opinion of the Court of Appeals for the First Circuit as follows:

> "'It does not seem to us that it would have occurred to a mechanic * * * skilled in the art either to disregard increasing shock-loss by radically increasing the spin of the entering air or to construct vanes of cylindrical contour for the purpose of providing passages between them "of substantially uniform cross section as the vanes are moved to closed position" so that control to minimum capacity by spin rather than by throttling would result. Thus the finding of patentable invention made by the Master and confirmed and adopted by the Court must stand.'"

and then added,

> "We think that these passages show clearly, that the court's conception of the invention lay in the overlapping of the vanes in space to provide passages of uniform cross section, for obviously, if they did not overlap in space, passages could not occur, or be provided between them."

There are passages between the vanes of all multiple vane spin controls of the prior art and they overlap in space. Eickhoff (R. 356, Chart Exhibit T), Moody (R. 357, Chart Exhibit Q), Moody (R. 359), Beaudrey (R. 392, Chart Exhibit U), and Brown, Boveri (R. 371, Chart Exhibit T)

are examples; but note that the Court of Appeals for the First Circuit states,

> "It does not seem to us that it would have occurred to a mechanic * * * skilled in the art either to disregard increasing shockloss by radically increasing the spin of the entering air *or to construct vanes of cylindrical contour for the purpose of providing passages between them* 'of substantially uniform cross section as the vanes are moved to closed position", (underscoring ours).

and that Claim 2 of the first Hagen patent defines the vanes as providing

> "substantially tangential admission of fluid when the vanes are closed, adjacent vane surfaces continuously approaching parallelism and having extended overlapping portions *shaped* to define passages of substantially uniform cross section as the vanes are moved toward closed position." (underscoring ours).

This "shaped" is the "cylindrical contour" referred to by the Court of Appeals for the First Circuit.

Petitioner's structures Exhibits B and C are the same as prior art patents so far as overlapping in space is concerned, for example see comparative chart Exhibit W, in which Exhibits B and C are compared to Moody 1,460,428.

It is respectfully urged that the public interests are paramount and that the Court of Appeals for the Sixth Circuit should have followed the application of the rule of res adjudicata as laid down by this Court in *Mercoid Corporation* v. *Mid-Continent Investment Co.*, 320 U. S. 661, 88 L. Ed. 376.

It is also respectfully urged that as a matter of public interest the Court of Appeals should have considered the question of validity and infringement as presented by the present record, and should not have extended or applied

the doctrine of res adjudicata beyond the findings of the Court of Appeals for the First Circuit and broadened the interpretation of the claims in suit to include practically all multiple vane controls of the prior art, which was done in finding infringement by Exhibits B and C, both on the basis of results accomplished and on the theory of overlapping of vanes in space.

POINT II. The Court of Appeals for the Sixth Circuit has failed to give proper consideration to the public interest in holding the second Hagen patent valid, which patent the patentee Hagen now admits is merely an adaptation of the structure of the first Hagen patent, which was applied to an induced draft fan, to a forced draft fan (R. 114), and the fact that such adaptation is taught by the art;

Cuno Engineering Corporation v. *Automatic Devices Corporation*, 314 U. S. 84, 86 L. Ed. 58;
Sinclair & Carrol, Inc. v. *Interchemical Corporation*, announced May 21, 1945 (unreported).

The patentee Hagen now admits (R. 114) that the second Hagen patent is merely an adaptation of the structure of the first Hagen patent, which was applied to an induced draft fan, to a forced draft fan. This application or adaptation is taught by the art, some prior art patents showing both forms, that is, a closed inlet such as shown in the first Hagen patent in an induced draft fan and the open inlet such as shown in the second Hagen patent in a forced draft fan. This adaptation is graphically illustrated in defendant's chart, Exhibit H, where the right hand end of the figure shows an induced draft adaptation and the left hand end a forced draft adaptation. Fig. 1 of Moody (R. 357) in chart Exhibit Q shows an induced draft adaptation, while Fig. 2 of Moody, Chart Exhibit R, shows a forced draft adaptation. Induced draft and forced draft fans are some-

times embodied in the same system (R. 94). Such an adaptation cannot amount to or impart patentable novelty under such authorities as

Cuno Engineering Corporation v. *Automatic Devices Corporation*, 314 U. S. 84, 86 L. Ed. 58;

Sinclair & Carrol v. *Interchemical Corporation*, announced May 21, 1945 (unreported);

DeForest Radio Corporation v. *General Electric Co.*, 283 U. S. 664;

Market Street Cable Railway Co. v. *Rowley*, 155 U. S. 621.

POINT III. The Court of Appeals for the Sixth Circuit has failed to guard the public interest in not holding the second Hagen patent invalid on this record which shows that the adjustment of the vanes through an angle of 90 degrees is merely a matter of mechanics, and that it is merely a matter of mechanics to make the vanes of the first Hagen patent adjustable through that range of degrees and that such range of adjustment of vanes and the arrangement of the pivots of the vanes obliquely to the rotor axis is not only taught by the art of record but was done by Hagen and his associates purely as a mechanical expedient to minimize obstruction of the eye of the fan.

Claim 1 of the second Hagen patent calls for a structure comprising a casing having an eye and a substantially conical inlet passage leading to the eye, which is old in Moody and other prior art. It further calls for a plurality of vanes in the inlet pivoted on axes which are oblique to the rotor axis and substantially at right angles to the conical inlet. While in Fig. 2 of Moody 1,460,428 (R. 357) and in Moody 1,578,843 (R. 359) the axes of the vanes are shown perpendicular to the rotor axis, both patents state that the axes of the vanes might well be contained in a conical surface

having its apex in the pump axis, or, in other words, arranged oblique to the rotor axis. See also Keller (R. 362).

> "The stop walls [vanes] can be radially or longitudinally adjustable or pivoted about a radial, longitudinal or oblique axis, or alter their position relatively to the inlet of the disc, in any practical manner."

The vanes are arranged at right angles to the conical inlet as called for by the claims of Hagen to prevent interference of the ends of the vanes with the wall of the inlet as they swing on their pivots. This is an obvious mechanical expedient and it is old in the art, see Moody 1,728,435, Figs. 7 and 8 (R. 361).

The patentee Hagen testified in this case (R. 89) that when the idea of applying the control to forced draft first occurred to "us" the vanes were placed on axes perpendicular to the fan shaft which brought them into the eye, the small diameter of the inlet. This cut down eye area or capacity and resulted in reducing the capacity of the fan, and therefore the vanes were moved farther forward into a larger portion of the inlet so that they would not reduce capacity of the eye; surely a mere matter of mechanics.

The claims of the second Hagen patent call for movement of the vanes through an angle of 90 degrees to a closed position. Respondent's expert Berry states that it is a mere matter of mechanics to provide a 90 degree range of adjustment of the vanes in the first Hagen patent (R. 138). That is also old in the prior art and should not be taken from the public domain to extend Hagen's monopoly by the issue of the second Hagen patent. The first Hagen patent was applied for August 4, 1927, and issued February 23, 1932. The second Hagen patent was applied for October 31, 1929, and issued January 9, 1935.

As to Claims 2, 3 and 4 of the second Hagen patent, the additional feature of the hub in Claim 2 is old in the art, in Moody for example. Claim 3 is Claim 1 with the addi-

tional element, "means for simultaneously and uniformly adjusting the vanes about their axes", which is common in prior art multiple vane output control structures. Claim 4 is Claim 2 with this element added.

It is respectfully urged that the Court of Appeals for the Sixth Circuit has failed to give proper consideration to the public interest in holding the claims of the second Hagen patent to involve inventive novelty, and that the rules of res adjudicata should not be applied in disregard of the public interest where claims of a patent are so obviously lacking in invention or are capable of being stretched beyond recognition,

Cuno Engineering Corporation v. *Automatic Devices Corporation*, 314 U. S. 84; 86 L. Ed. 58;

Sinclair & Carrol v. *Interchemical Corporation*, announced May 21, 1945 (unreported); *United Carbon Company et al* v. *Binney & Smith Co.*, 317 U. S. 228, 87 L. Ed. 232;

General Electric Company v. *Wabash Appliance Corporation*, 304 U. S. 364, 82 L. Ed. 1402.

POINT IV. The Court of Appeals for the Sixth Circuit, by adopting and applying respondent's present theory of 100% overlapping of vanes in fully open position and construing the claims to cover petitioner's structures Exhibits B and C because they have vanes overlapping in space, has disregarded the public interest to the extent that this interpretation of the claims would make them apply to most multiple vane controls and most of the prior art patents, many of which have expired and are in the public domain.

In Finding of Fact 32 (R. 43) the District Court held:

"32. In the theory of a 100% overlap when the vanes are in fully open position, there is no such shifting of theory by plaintiff from that taken by it in the Massachusetts case, as to warrant refusal to apply the doctrine of res adjudicata."

In fully open 100% overlap position the vanes perform no work and are merely obstructions to the flow of air. On this presently urged theory, approved by the Court of Appeals for the Sixth Circuit, the degree of overlapping in space begins to decrease immediately the vanes are moved from fully open toward closed position, until in Exhibits B and C there is no overlapping in space or in any other sense when the vanes are closed or as they approach closed position.

The Sixth Circuit Court of Appeals has held that this overlapping in space should be read into the opinion of the First Circuit Court of Appeals. There is no word in that opinion about overlapping in space. There is discussion about overlapping of vanes in the sense of the edge of one vane projecting beyond and in overlapping relation to the edge of the adjacent vane when the vanes are moved toward closed position. The First Circuit likened the arrangement of vanes of the first Hagen patent to the staves of a barrel and added (122 Fed. 2d 900 at page 905, column 2),

> "In likening Hagen's vanes to the staves of a barrel it must be borne in mind that, when in closed position, they do not meet edge to edge like barrel staves, but overlap one another."

The vanes of petitioner's structures Exhibits B and C do not overlap one another when closed. In Exhibit B they meet edge to edge, see Cuts 7 and 8 of Chart Exhibit G. In Exhibit C there is a substantial opening between them, see cut 9, Exhibit G. (See also photograph of Exhibit C, R. 350, Comparative Chart Defendant's Structures B and C, Exhibit W, and Comparative Chart, Diagrammatic Views of Vanes Defendant's Structures B and C, Certain Prior Art Patents and Hagen's First and Second Patents, Exhibit Y).

Overlapping of vanes in space is common to all prior art multiple vane controls; indeed, it is the very essence of all

such vanes (Eickhoff, R. 356, Chart Exhibit T; Moody, R. 358; Chart Exhibits Q and R; Moody 1,728,432, Chart Exhibit S; Brown, Boveri, R. 372, Chart Exhibit T; Beaudrey, R. 392, Chart Exhibit U.) In all of these patents the vanes overlap in space and overlapping in space cannot be the determining factor.

Not only the public interest but the primary purpose of the patent system is disregarded when claims are held to be valid and so construed as to cover disclosures of the prior art as has been done by the Court of Appeals for the Sixth Circuit in applying respondent's presently urged theory of overlapping in space to find infringement by Exhibits B and C,

Sinclair & Carrol v. *Interchemical Corporation* announced May 21, 1945 (unreported); *Pennock* v. *Dialogue*, 2 Pet. 1;

Motion Picture Patents Corporation v. *Universal Film Corporation*, 243 U. S. 502; *United States* v. *Masonite Corporation*, 316 U. S. 265 (see p. 278);

Mercoid Corporation v. *Mid-Continent Investment Company*, 320 U. S. 661.

POINT V. The Court of Appeals for the Sixth Circuit has overlooked the public interest in holding petitioner's Exhibits B and C to infringe both patents in suit on the basis of results accomplished, and has further overlooked the public interest to the extent of giving the claims such scope as to embrace the prior art structures and has given the mechanical Claim 2 of the first Hagen patent the effect and scope of the method Claim 1 held invalid by the Court of Appeals for the First Circuit, and has unwarrantedly extended the finding of the Court of Appeals for the First Circuit.

The District Court and the Court of Appeals for the Sixth Circuit made no attempt to apply the claims in suit to petitioner's structures Exhibits B and C but found infringement on the basis of results accomplished; the results

accomplished being spin control through a range not stated or defined by either Court and the results accomplished being within the range of embodiments of prior art structures, the means for accomplishing the results being also old in the prior art.

The Court of Appeals for the First Circuit held method Claim 1 of the first Hagen patent invalid as merely, if anything, the carrying forward of the old method of spin control by old means disclosed in several prior patents. However, in this case the Court of Appeals for the Sixth Circuit, on the basis of results accomplished, has extended the mechanical claims of the Hagen patents to include Exhibits B and C although they embody old mechanisms and the results accomplished are within the range of structures embodying Eickhoff (Exhibit LL, Test Chart of Exhibits B and C, R. 398, and Exhibit NN, 3 sheets, separate Chart Exhibit Book).

It is respectfully urged that in so doing the Court of Appeals for the Sixth Circuit has unwarrantedly extended the doctrine of res adjudicata to the detriment of the public and the respondent, and has unwarrantedly extended the finding of the Court of Appeals for the First Circuit as to Hagen's inventive step.

POINT VI. This Court in the public interest should exercise its supervisory authority and review the decision of the Court of Appeals for the Sixth Circuit, determining the validity of both patents in the light of the record in this case, the admissions of the respondent herein and the respondent's presently urged theory of 100% overlapping of the vanes in fully open position, which is an incident to several prior art patents. If this Court should determine the patents in suit to be valid, the rights of the public should be definitely determined by fully defining the meaning and scope of the claims, inasmuch as this has not been done by any court

considering them but which, without attempting to apply to Exhibits B and C, the Court of Appeals for the Sixth Circuit has, on the basis of results accomplished, extended to cover prior art patents having spin control vanes overlapping in space.

The paramount interest of the public is well stated in *Motion Picture Patents Corporation* v. *Universal Film Corporation*, 243 U. S. 502. It was restated in *United States* v. *Masonite Corporation*, 316 U. S. 265, again in *Mercoid Corporation* v. *Mid-Continent Investment Co.*, 320 U. S. 661, and as late as May 21, 1945, in *Sinclair & Carrol* v. *Interchemical Corporation* (not reported).

The Court of Appeals for the First Circuit left no reason for expanding Hagen's inventive act or his claims in suit, certainly not to expand them on the 100% overlapping of vanes in fully open non-functioning position theory, or overlapping in space theory, when all vanes of the prior art overlap in space and form directing passages between them to the same extent as in Exhibits B and C. The Court of Appeals for the Sixth Circuit has held Exhibits B and C which have no overlap whatever in closed position to infringe. In fact, in Exhibit C there are substantial spaces between the vanes when closed and there is mere edge to edge contact in Exhibit B.

Respondent urged its theory of 100% overlap in fully open position in this case because there is no such overlap as described by the Court of Appeals for the First Circuit when the vanes are closed, or such as is called for by the language of the claim of the first Hagen patent. In no position of adjustment is there an overlapping such as pointed out by the Court of Appeals for the First Circuit in likening the vanes to barrel staves (122 Fed. 2d 900, at page 905, column 2),

> "In likening Hagen's vanes to the staves of a barrel it must be borne in mind that, when in closed position,

they do not meet edge to edge like barrel staves, but overlap one another."

It is respectfully urged that public interests require that this Court should review this case and if the Court should determine the claims to be valid, then the rights of the public should be determined by this Court's fully determining the meaning and scope of the claims, which has not been done by the Court of Appeals for the Sixth Circuit in holding Exhibits B and C to infringe on the basis of results. Neither the District Court nor the Court of Appeals for the Sixth Circuit made any attempt to apply the claims in suit to the structures Exhibits B and C, but found infringement on the basis of results accomplished, thereby extending the claims to cover prior art patents having spin control vanes overlapping in space and accomplishing substantially the same results in substantially the same way by using the same or equivalent means. In so doing the Court of Appeals for the Sixth Circuit has by judicial decree given to Hagen (respondent) what has long been a part of the public domain, and we respectfully urge that this Court should act to protect the public interest in this important matter.

Conclusion

WHEREFORE, the petitioner earnestly prays that the petition for writ of certiorari be granted, the cause reviewed, and the decree of the Court of Appeals for the Sixth Circuit reversed.

Respectfully submitted,

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